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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |
|--|-------------|----------------------|-------------------------|------------------|
| 09/944,300   | 08/31/2001  | Bernd Souvignier     | DE000133                | 2162             |
| 24737  | 7590        | 03/07/2005           | EXAMINER                |                  |
| PHILIPS INTELLECTUAL PROPERTY & STANDARDS<br>P.O. BOX 3001<br>BRIARCLIFF MANOR, NY 10510 |             |                      | ALBERTALLI, BRIAN LOUIS |                  |
|  |             |                      | ART UNIT                | PAPER NUMBER     |
|  |             |                      | 2655                    |                  |

DATE MAILED: 03/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 09/944,300             | SOUVIGNIER, BERND   |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | Brian L Albertalli     | 2655                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-4 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_ is/are allowed.
- 6) Claim(s) 1-4 is/are rejected.
- 7) Claim(s) \_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 25 October 2004 is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    - a) All    b) Some \* c) None of:
      1. Certified copies of the priority documents have been received.
      2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.
      3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | Paper No(s)/Mail Date. ____ .   |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: ____ .                                   |

## DETAILED ACTION

### ***Response to Amendment***

1. The amendments to the application have been entered. Claims 1-4 are currently amended.

### ***Response to Arguments***

2. Applicant's arguments filed October 25, 2004 have been fully considered but they are not persuasive.

The Applicant argues that Strong does not disclose evaluating a word subsequence with a *plurality* of different speech models (see Applicant's arguments, page 6 line 20 to page 7, line 11). The Applicant relies on selected portions of Strong (for example, Fig. 3) to support the argument. This is not persuasive for at least two reasons.

Firstly, as cited in the previous rejection of claim 1, the language model interpreter 230 queries a plurality of application programs 241, 242, etc., to generate language models wherein the different language models are transmitted to recognizer 220 (see specifically column 5, lines 14-17 and lines 20-24). Each of these language models is used in to evaluate the word subsequence.

Secondly, the applicant is directed to Fig. 7. Strong discloses that a language model may reference other language models for more complex series of words. Fig. 7 shows a language model (LM4) that is composed of other language models (LM1, LM2, LM3). When language model LM3 is determined to be a match for a word

subsequence, path 704 is traversed, through intermediate state 705 and through remaining path 706, wherein the word subsequence is evaluated by language model LM1 (see column 8, lines 15-38). The word subsequence is evaluated by language model LM3 and language model LM1. Strong, therefore, clearly teaches evaluating a word-subsequence with a *plurality of* different speech models.

3. Therefore, the rejections made in the previous Office Action stand.

### **Specification**

4. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

#### **Arrangement of the Specification**

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (e) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.
  - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) BRIEF SUMMARY OF THE INVENTION.

Art Unit: 2655

- (g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (h) DETAILED DESCRIPTION OF THE INVENTION.
- (i) CLAIM OR CLAIMS (commencing on a separate sheet).
- (j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

5. The objection to the abstract is withdrawn.

***Drawings***

6. The drawings are objected to because the labels (such as element 8 in Fig. 1, the handwritten words in Figs. 2 and 3) are blurry and difficult to read. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Strong (U.S. Patent 5,384,892).

In regard to claim 1, Strong discloses a speech system (Fig. 2, 200, Strong does not state that the system is a “dialogue” system, however, the examiner has not given any patentable weight to “dialogue”, as none is recited in the claims) comprising a speech understanding unit (language model generator/interpreter 230) in which, for identifying a meaningful word subsequence from a recognition result (recognized words 221, column 5, lines 36-40) produced by a speech recognition unit (recognizer 220) which result was determined for a word sequence fed to the speech dialog system (digitized sound signals 201), the word subsequence is evaluated by different speech models (language models 222). See column 4, line 56 through column 5, line 25.

In regard to claim 2, Strong discloses a general speech model and at least one theme specific speech model are provided for evaluating the word subsequence.

Strong discloses a set of language models (Figs. 4-6, LM1-3 and Figs. 11-12 LM6) that are theme specific speech models (column 7, line 45 through column 8 line 14 illustrates an example in which the theme is “numbers”, while column 8, line 59 through column 9, line 22 illustrates an example in which the theme is “documents”). Each language model is constructed from a phrase list of words that can be recognized and their associated meanings (column 7, lines 16-44).

Additionally, Strong discloses that a general speech (language) model is constructed from a general (global) context rule set partition (Fig. 13, 1330). The elements are always active (column 12, lines 28-29 and lines 50-57).

In regard to claim 3, Strong discloses a theme specific speech (language) model (Figs. 11 and 12, LM6) to which a database ("Documents" directory, Fig. 8a, 801) with respective theme specific data material (file names 802-805) is assigned, which material is used for determining the semantic information contained in the word subsequence (which phrases will be in language model LM6).

LM6 is a dynamic language model that depends on the contents of the "Documents" directory 801. See Fig. 11. When a new file is added to the directory, such as "Memo 2" (Fig. 9a, 906), the language model, which determines the semantic information carried in the word subsequence, is updated to include "Memo2" (Fig. 12, column 8, line 48 through column 9, line 50).

In regard to claim 4, Strong discloses a method of extracting a significant word subsequence from a recognition result of a speech dialogue system, in which a word subsequence is evaluated with different speech models in a speech understanding unit of the speech dialog system (column 14, lines 10-58).

Several different speech models are included in the speech understanding unit (language model generator/interpreter 230) depending on the context of system (Fig 15, steps 1511 and 1513, column 14, lines 10-58). The word subsequence that matches speech rules defined by the speech models (Fig. 16, step 1605) is used to perform various scripts (1609), otherwise, if the input speech does not match any speech rule, the system returns to and idle state (1611, column 14, line 59 through column 15, line 14).

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

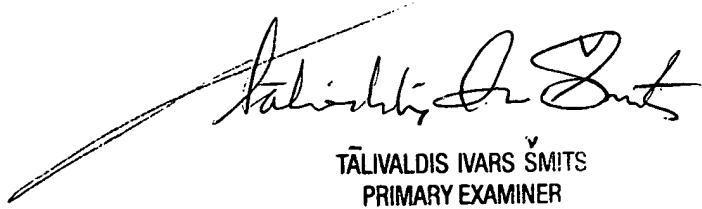
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian L Albertalli whose telephone number is (703) 305-1817 until March 28, 2005. After March 28, 2005, the examiner can be reached at (571) 272-7616. The examiner can normally be reached on Mon - Fri, 8:00 AM - 5:30 PM, every second Fri off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Talivaldis Smits can be reached on (703) 305-3011. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BLA 3/2/05



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PRIMARY EXAMINER